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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/809,405

03/15/2001

Frank Rademacher

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EXAMINER

SENGI, BEHROOZ M

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

09/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/809,405	Applicant(s) RADEMACHER ET AL.	
	Examiner BEHROOZ SENFI	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-8 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-8 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/2/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,3-4,6-8,11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas Enkelmann (EP 254192) in view of Rosinski et al (US 5,793,308).

Regarding claim 1, Thomas discloses, an industrial truck (i.e. fig. 1, truck 16), comprising; a driver's seat located in a driver's cab, the driver's seat oriented in the forward direction (i.e. fig. 1, shows the driver seat and the driver's seat oriented in a forward direction), at least one screen located in the vicinity of the driver's seat (i.e. fig. 2, screen 1 located in the vicinity of the driver), a counterweight located on a rear of the truck (i.e. fig. 2, counterweight 19), a first camera pointing toward the rear (i.e. fig. 2,

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camera 2”), the first camera mounted on the rear of the vehicle to the rear of the driver's seat and above the counterweight at a first height (fig. 2, camera 2” mounted on the rear of the vehicle to the rear of the driver's seat and above the counterweight at a first height) wherein the first camera provides a view of a distant area behind the industrial truck (i.e. fig. 2, camera 2” provides a view of a distant area), and wherein the image taken with the first camera and/or the image taken with the two additional cameras can be displayed on the screen (i.e. fig. 2, display screen 1, for displaying the image taken from the camera).

Thomas indicates additional/further camera can be mounted at the front or rear of the industrial truck (i.e., page 5, last paragraph). Thomas is silent in regards to explicit of, two additional cameras are each mounted on the rear of the industrial truck to the rear of the driver's seat and on an upper segment of the driver's at a height greater than the first height, the two additional cameras being spaced outwardly from the first camera on opposing sides of the first camera and each having a diagonally downward directed angle of view, and the two additional cameras provide a view of a near area behind the industrial truck.

Rosinski (i.e., figs. 11A-11B and 12B-12C, shows the arrangement of two additional cameras or multiple cameras mounted on the rear of the industrial truck, e.g., having rear field of view, the two additional cameras being spaced outwardly from the first camera on opposing sides of the first camera, for example; fig. 12B shows the two cameras on the two additional cameras spaced outwardly from the first camera, and the two additional cameras provide a view of a near area behind the industrial truck, e.g.,

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the two cameras as shown in fig. 12, provide a view of a near area behind the industrial truck).

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify and increase field of view of the operator in device for driving vehicles of Thomas, in accordance with the teaching of Rosinski by incorporating multiple cameras, to allow a vehicle operator to view blind spots (e.g. near area behind the vehicle/truck) at the rear end of the vehicle, as suggested by Rosinski (col. 2, lines 58-63).

Regarding claim 3, it is noted that combination of Thomas and Rosinski is silent in regards to, two additional cameras are each equipped with a wide-angle lens, as claimed. Examiner takes Official Notice to note that, the use of wide-angle lens in the camera is notoriously well known and conventionally used for the benefit of covering larger area in video navigation and/or monitoring. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement such teaching as they are notoriously well known in the conventional art, to view or cover larger area under camera monitoring.

Regarding claims 4 and 6, the combination of Thomas and Rosinski teaches, switching device by which the far area viewed by the first camera or the near area viewed by two additional cameras can be selectively displayed on the screen as desired (i.e. col. 7, lines 8 – 15, selectively displaying the images from the camera).

Regarding claims 7 – 8, wherein the screen is effectively connected with an

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image mixer by which the images taken by the two additional cameras are superimposed on each other on the screen (Rosinski, figs. 2 – 3, CPU 21 and MCU 211, col. 3, lines 30 – 32, col. 6, lines 4 – 6 are being used to superimposed images on the screen).

Regarding claim 11, the combination of Thomas and Rosinski teaches, the limitation “screen is located inside a driver’s cab of the industrial truck in the vicinity of the driver” reads on (Thomas; fig. 2, screen 1).

Regarding claims 12 - 13, the combination of Thomas and Rosinski teaches, wherein the industrial truck has a steering device with an electrical steering sensor (fig. 1, device 4, col. 1, lines 55 – 60, col. 2, lines 23 – 26 and col. 5, lines 57 – 67).

Regarding claim 14, the combination of Thomas and Rosinski teaches, screen display (Thomas; fig. 2, screen display 1) for displaying images captured by the camera to the vehicle operator. It is noted that Thomas is silent in regards to screen is in the form of a “flat screen”; however the functionality of the screens are the same and both are used for displaying the images taken from the imaging device (i.e. camera). Furthermore; Examiner takes Official Notice to note that; the use of a flat screen is well known and conventionally used in the prior art of the record. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use a flat screen as an alternative screen, for providing images captured by the camera to the vehicle operator.

Regarding claim 15, the combination of Thomas and Rosinski teaches, the claimed forklift truck (Thomas; fig. 1, forklift truck 16).

Regarding claims 16-17, the combination of Thomas and Rosinski teaches, two additional cameras being mounted to a rear of the truck, different arrangement of mounting multiple cameras in different height in the rear of the truck, as discussed in claim 1 above,. Thomas (i.e., fig. 2, camera 2”) shows the camera being mounted to a rear column of the driver’s seat. Rosinski as discussed in claim 1 above, teaches arrangement of plurality of cameras being mounted in different height in the rear of an industrial truck. Therefore the combined teachings of Thomas and Rosinski make it obvious to one having ordinary skill in the art to realize the advantage of adding/mounting additional cameras in to a rear column of the driver’s seat in device for driving vehicles of Thomas, to increase the field of view of the driver.

Response to Amendment

4. Applicant's arguments filed 7/2/2008 have been fully considered but they are not persuasive.

Response to remarks:

Applicant asserts (page 7, lines 14-17) that Rosinski dos not teach or suggest a camera configuration where two additional cameras are mounted to the rear of a vehicle above the height of a first camera, which are spaced outwardly from the first camera on opposite sides of the first camera and each have a diagonally downward directed angle of view.

Examiner indicates that, for example, in Rosinski, fig. 12B the two cameras on the opposite side of the first camera which are spaced outwardly from the first camera, and is arranged to have a rear field of view, consider as two additional cameras, thus

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covers the scope of the claim; further examiner indicates that the positions of the cameras mounted on the vehicle/truck in different height consider as a design choice based on the user intended use.

Contact

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Behrooz Senfi whose telephone number is 571-272-7339. The examiner can normally be reached on M-F 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Behrooz Senfi/
Primary Examiner
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